

# HERO GUIDANCE ON CRITICAL REVIEW OF RESEARCH EVIDENCE • APPLICATION TO 2019 JAMA STUDY BY SONG AND BAICKER



## EXECUTIVE SUMMARY

In 2014, HERO asked recognized experts to address the question, “Do workplace health promotion (wellness) programs work?”<sup>1</sup> Their collaborative paper provides an overview of the substantial evidence base indicating that well-designed, comprehensive workplace health and well-being (HWB) initiatives integrated into supportive organizations yield high participation rates, sustained behavior change, improved health and workplace performance, and positive economic outcomes. Despite a large and growing evidence base demonstrating positive outcomes of best-practice HWB initiatives and providing guidance on their design, implementation and evaluation,<sup>1</sup> media coverage of occasional studies with negative findings can create confusion among employers about what really works in wellness. This commentary is intended to support assessment of such findings by providing tips on how to critically examine research on program effectiveness. To illustrate how these tips can be used in practice, we apply them here to the 2019 randomized clinical (RCT) trial by Drs. Song and Baicker of a wellness intervention implemented for employees of BJ’s Wholesale Club.<sup>2</sup>

**Critical review of published studies should pose questions about the study and underlying HWB intervention rather than relying solely on media stories. When details of the study and intervention are not readily available, related media coverage should be approached with these questions in mind:**

	How is this single study similar to or different from previously published studies on HWB program effectiveness?		Did the study use an appropriate evaluation approach?
	Does the tested intervention represent a best practice approach?		Are there indications the researchers had preexisting beliefs about HWB initiatives that may have influenced their research methods or interpretation of results?
	Was enough time allowed for the intervention to meaningfully impact the outcomes studied?		Were there unexpected or important findings not reported in media coverage of the study?



The study by Drs. Song and Baicker represents a rigorous evaluation,<sup>3</sup> but one applied to the first 18 months of a very basic wellness program. For this reason, the results are not generalizable to best-practice approaches combining comprehensive, evidence-based HWB initiatives with broad organizational, cultural, and leadership support. The study found that participation in at least one wellness module lasting 4 to 8 weeks yielded statistically significant improvements in physical activity and weight management behaviors, but did not impact downstream clinical, financial, and business outcomes within the 18-month study timeframe. Although longer follow-up would be required to determine if the initial health behavior changes amongst a relatively small number of participants would ultimately yield population-level clinical and financial outcomes, initiatives associated with such positive organizational outcomes are typically much more comprehensive and include social, environmental, and cultural supports<sup>1</sup> that appear to have been lacking in the organization on which the study was based.<sup>4</sup>

### References

- <sup>1</sup> Goetzel RZ, Henke RM, Tabrizi M, et al. Do workplace health promotion (wellness) programs work? *Journal of Occupational and Environmental Medicine*. 2014; 56(9): 927-934.
- <sup>2</sup> Song Z and Baicker K. Effect of a workplace wellness program on employee health and economic outcomes: A randomized clinical trial. *JAMA*. 2019; 231(15): 1491-1501.
- <sup>3</sup> Abraham JM. Employer wellness programs – A work in progress. *JAMA*. 2019; 231(15): 1462-1463.
- <sup>4</sup> Heart of Human Capital Blog. Wellness program headlines miss the point: The importance of context in enabling program effectiveness. April 25, 2019. Available at: <https://www.heartofhumancapital.com/blog/2019/4/25/wellness-program-headlines-miss-the-point-the-importance-of-co>